DoD Enterprise Voice

AFCEA Defensive Cyber Operations Symposium

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Enterprise Voice Agenda

- **General**

- **EVoIP**

- **ECVoIP**

Enterprise Voice Objective

Improve mission Command and Control (C2) while reducing overall cost of ownership for DoD by providing a secure, scalable, centrally managed high quality service offering

Enterprise Voice and JIE

Joint Information Environment Enablers

Joint Information Environment

Infrastructure Network Normalization and Transport
- Transition to EOCs and OOB networks
- Data Center consolidation
- Transport modernization

Single Security Architecture and IdAM
- Enterprise security
- JRSS
- Role-based access

Enterprise Applications and Unified Capabilities
- DEPS, DEE, DCO, DEM, EDS, Cloud Computing Services
- GVS, **EVoIP**, **ECVoIP**, DMUC, DMCC, Chat, Presence

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Why Transition

- **The current environment does not enable:**
  - Strategic
  - Tactical
  - Classified
  - Multinational Missions

- **Disparate solutions**
  - Non-interoperable
  - Duplicative
  - Difficult to manage

- **DoD needs a broad range of interoperable and secure capabilities for converged, non-assured and assured voice, video, and data services from the end device through LANs and across the backbone networks**

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Enterprise Voice Drivers

- *Efficiencies –* Common architecture across DoD based on the APL

- *Effectiveness –* Delivery of converged, end-to-end IP services requires simplified equipment string and body of knowledge

- *Interoperability –* Leverages commercial NEXTGEN offerings

- *Time and Cost Savings –* Combined with the convergence of secure voice, video, and messaging technologies across MILDEP boundaries with end-to-end security and authentication, vendor competition lowers IT training and equipment costs
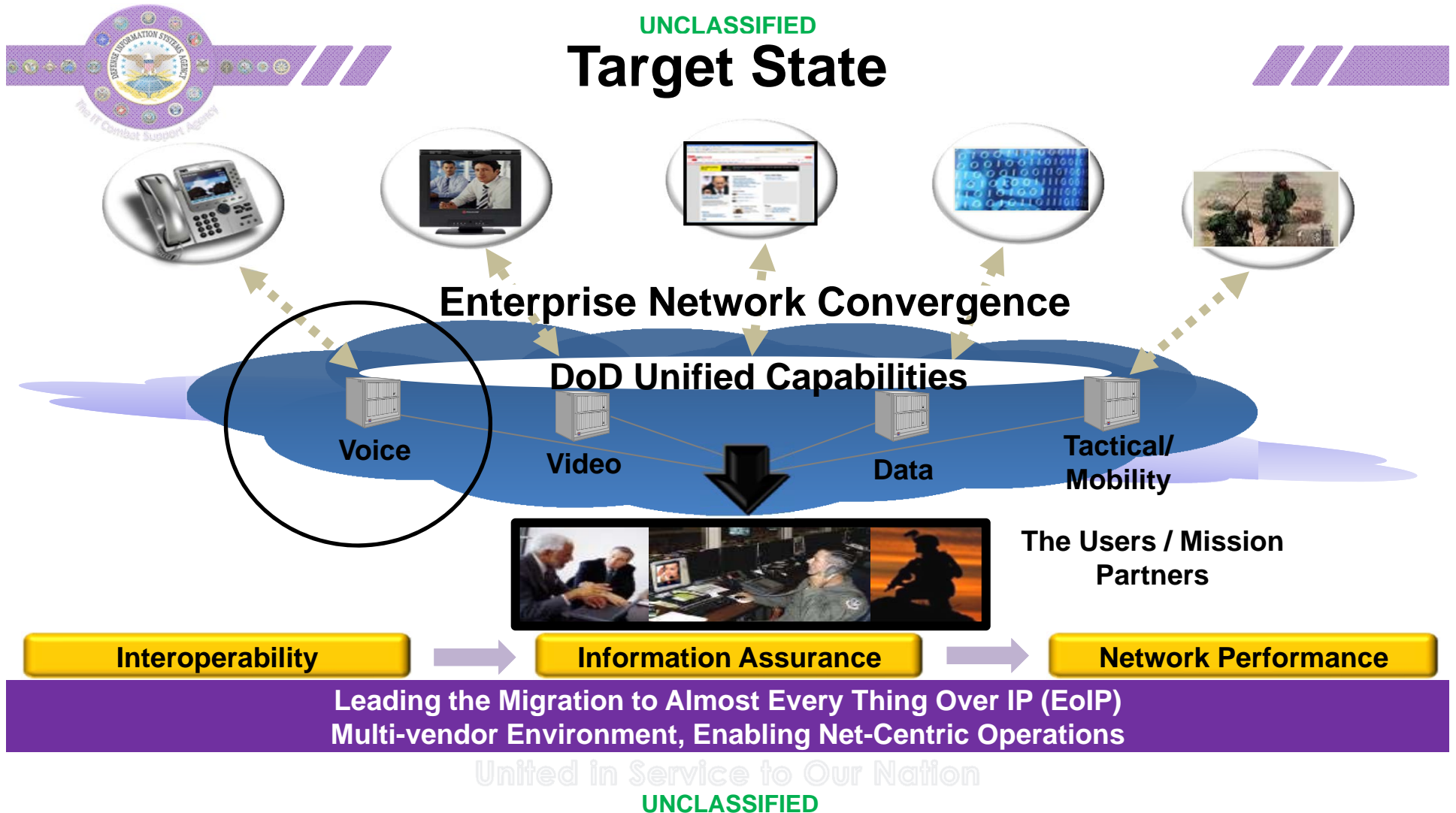
- **Enables DoD components to reduce cost with maintenance of session controllers in their enclaves**
- **EVoIP customers can deploy hardphone endpoints or soft clients at the site while DISA manages/sustains "in the cloud"**
- **Reduces costs for DoD installations by supporting access to a broad range of voice and other UC features**

Target State

Enterprise Network Convergence

DoD Unified Capabilities

Voice

Video

Data

Tactical/ Mobility

The Users / Mission Partners

Interoperability	➡	Information Assurance	➡	Network Performance

**Leading the Migration to Almost Every Thing Over IP (EoIP)
Multi-vendor Environment, Enabling Net-Centric Operations**

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Key Features

EVoIP

- **Lower Total Cost of Ownership**

- **Voice, IM/Char, Presence, Voicemail, and More**

- **Integrated Soft Client with Full UC Capabilities**

- **Port Both Commercial and DSN Numbers**

- **Emergency Calling Services Fully Supported**

ECVoIP

- **Global Management and Provisioning**

- **Extension Mobility (roaming profile)**

- **Regional Failover Capabilities**

- **Customer Tiered Permissions**

- **Soft Client / IM Chat (future capability)**

EVoIP Current & Future States

Current

Future

| 17 WAN Soft Switched Operational Globally | → | 17 WAN Soft Switched Operational Globally |

| 7 Enterprise Session Controllers (ESC) | → | 22 Enterprise Session Controllers (ESC) |

| 13 Upgraded to session controllers | → | 15 Upgraded to session controllers |

ECVoIP Current & Future States

Current	Future
Regional Cluster Call Manager	**Global Management Call Manager**
Dial Tone Only	**Jabber/IM Chat/Video**
Local Active Directly	**Enterprise Active Directly**
No Secure Conferencing	**Enterprise Secure Conferencing**

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Ordering Information

EVoIP

http://www.disa.mil/Network-Services/Voice/EVoIP
Email: disa.meade.ns.list.evoip@mail.mil

ECVoIP

http://disa.mil/Network-Services/Voice/DISA-Enterprise-CVoIP
Email: disa.meade.ns.list.vosipecvvoip@mail.mil

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DEFENSE INFORMATION SYSTEMS AGENCY

The IT Combat Support Agency

EVoIP Environments

Environment 1

Utilizes Failover Session Controller for emergency services during WAN outage

- **Largest LAN footprint**
- **Highest Cost**
- **Full survivability in WAN outage**
- **Customer maintained local equipment**

Environment 2

Limited local infrastructure to provide basic calling during emergency outage

- **Smaller LAN footprint**
- **Smaller Cost**
- **Basic calling during WAN outage**
- **Customer maintained local equipment**

Environment 3

Only endpoints deployed on premises

- **Smallest LAN footprint**
- **Lowest Cost**
- **Redundant NIPRNET circuits recommended**
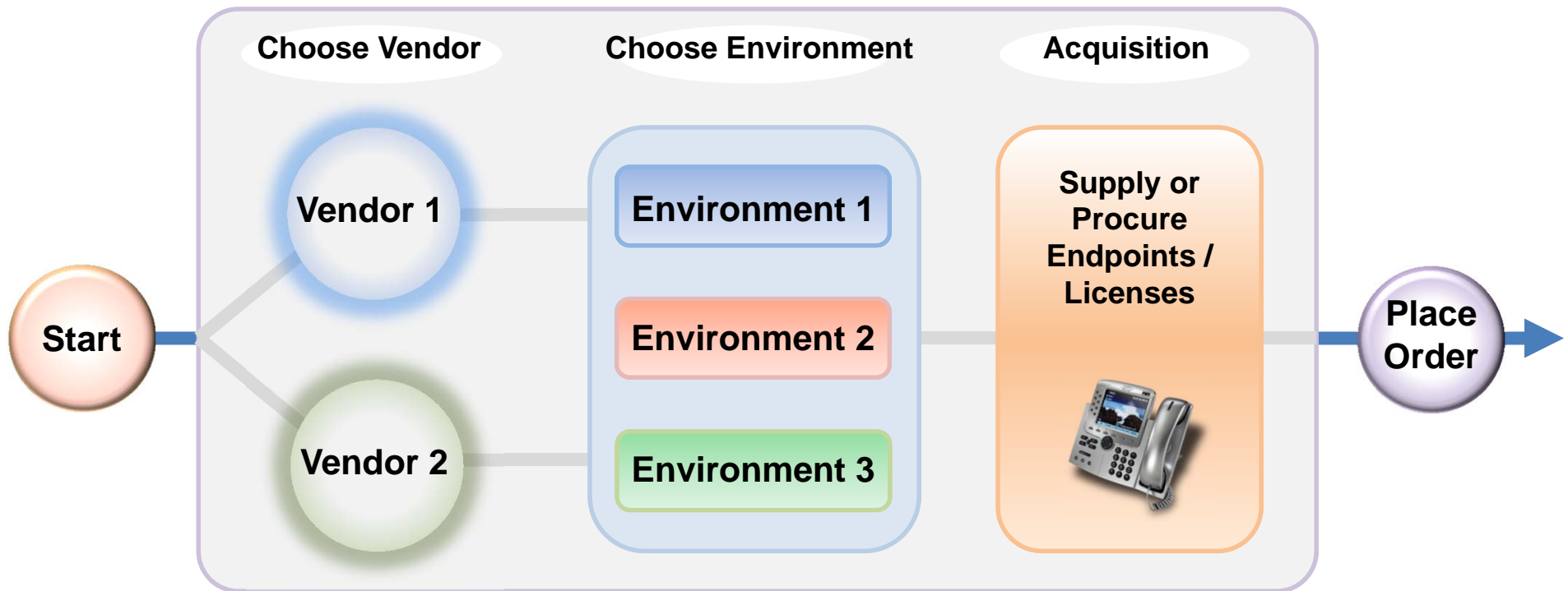- **No customer maintained local infrastructure**

Obtaining EVoIP Service

Choose Vendor

Choose Environment

Acquisition

Start

Vendor 1

Vendor 2

Environment 1

Environment 2

Environment 3

Supply or Procure Endpoints / Licenses

Place Order

ECVoIP Advantages

- **Cost Avoidance: no longer a need for procurement, installation and O&M of equipment at B/P/C/S**

- **Centralized network management and provisioning customers at DISA CONUS**

- **Provides access to all VoSIP enclaves, DRSN and allies**

- **Takes advantage of Extension Mobility; customers log onto the system using a PIN and Username**

- **Roaming profile capabilities within regions (CONUS, PAC, EUR); users can log onto any ECVoIP phone within the region**

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